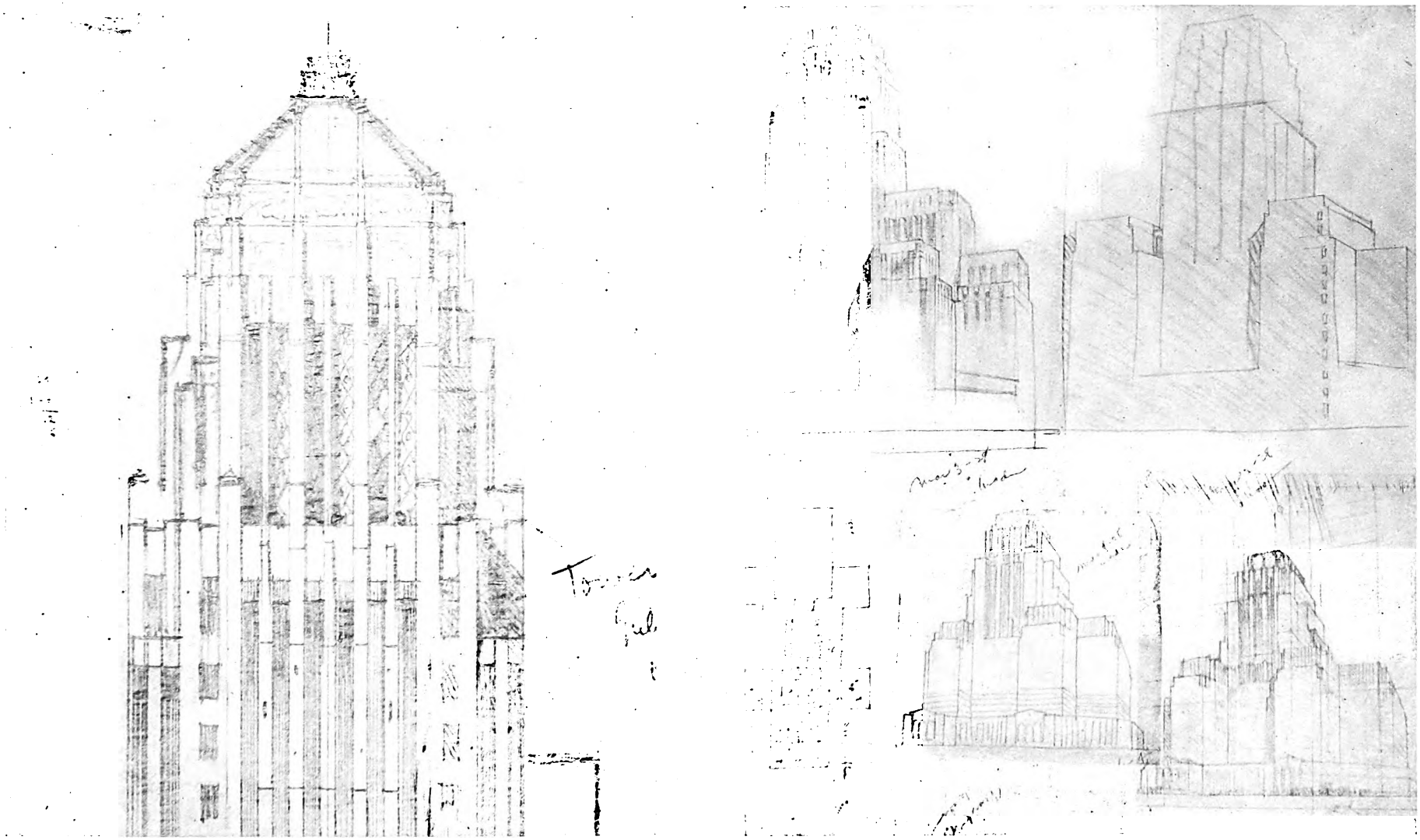

ONE OF MANY STUDIES FOR THE TOWER AND SOME PRELIMINARY MASS STUDIES TO DETERMINE GENERAL SHAPE OF STRUCTURE—SEE TEXT OPPOSITE

BUFFALO CITY HALL—DIETEL AND WADE AND SULLIVAN W. JONES, ARCHITECTS

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SOME RADIO PUBLICITY

AN ADDRESS ON ARCHITECTURE, DELIVERED OVER STATION WKBW, BUFFALO, NEW YORK, LAST JANUARY

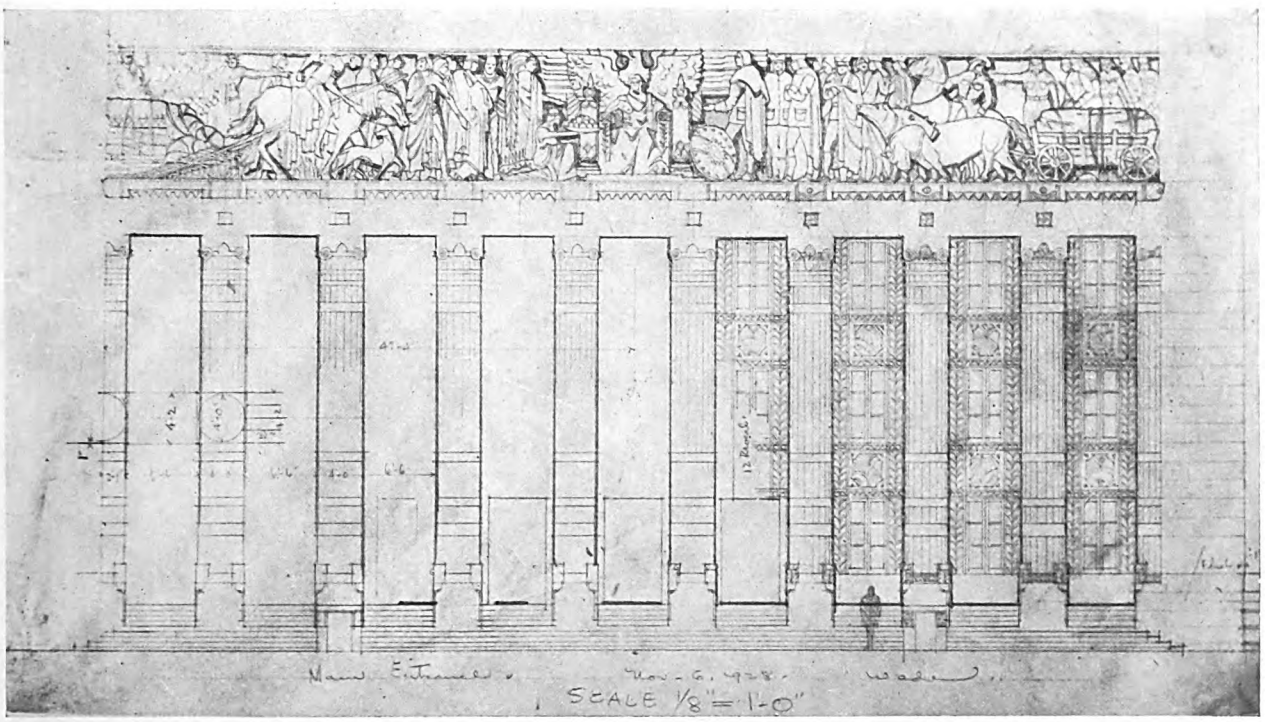
By John J. Wade

EDITOR'S NOTE:—*The illustrations used with this article were published in the Buffalo Courier-Express on the morning preceding the radio talk so that listeners could follow the references. Talks such as this can help materially in developing public appreciation and understanding of architecture.*

ALWAYS, THE HISTORY of mankind has been written in terms of architecture. To the discerning eye, each fragment of tablet, each bit of carved stone or metal, adds its bit of knowledge about the races which have gone before. In precisely the same manner, we are writing today in terms of architecture the story of our time for future races of mankind to read, and reading these, to understand us as we are. But architecture is something more than a mere external harmony of form and color and something more than a mere historical record of this or any other time. There has been a very definite reason for every building that has ever been erected.

This reason is related directly to the lives of the people who built it or caused it to be built. That is why it forms so excellent a record of their lives and their work. It has been very well said that the chief difference between civilization and savagery is that civilization brings with it a great increase in the number and the complexity of a people's needs. All of the beautiful buildings of the past have been created to serve necessary purposes; that is, to meet the needs of the people of that time. Each such building has merit, measured inevitably by the question of how well it serves those purposes for which it was built—in a word, by how well it works and fulfills its functions. No amount of ornamentation—no excellence in the quality of its materials—no fine artistry in putting together its parts can reclaim a building that does not at once declare its purpose and perform the functions for which it was brought into existence.

From time to time we hear of people agitating for what they are pleased to call a distinctive American national style of architecture. This impulse to express nationalism in architecture is a natural one. It does credit to the patriotism, at least, of the people who promote it. But those who point to the architecture of Egypt, of Athens, of Byzantium or of Gothic France, and plead for a style of architecture that will be equally distinctive of America, lose sight of something. They lose sight entirely of the great difference in size between the tiny states of the Mediterranean coast and the vast domain which we call the United States of America.



MAIN ENTRANCE LOGGIA, BUFFALO CITY HALL—DIETEL AND WADE AND SULLIVAN W. JONES, ARCHITECTS

THE SCULPTURE SHOWN ON THIS STUDY IS NOT THE FINAL DESIGN

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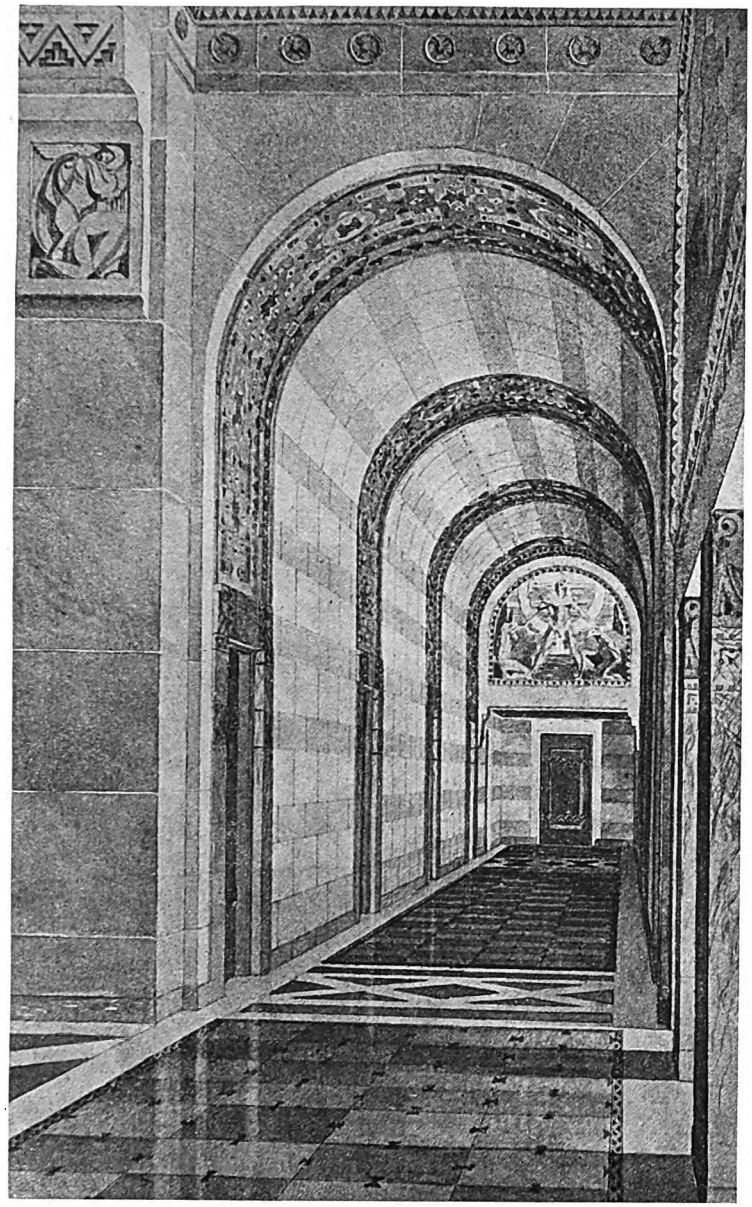

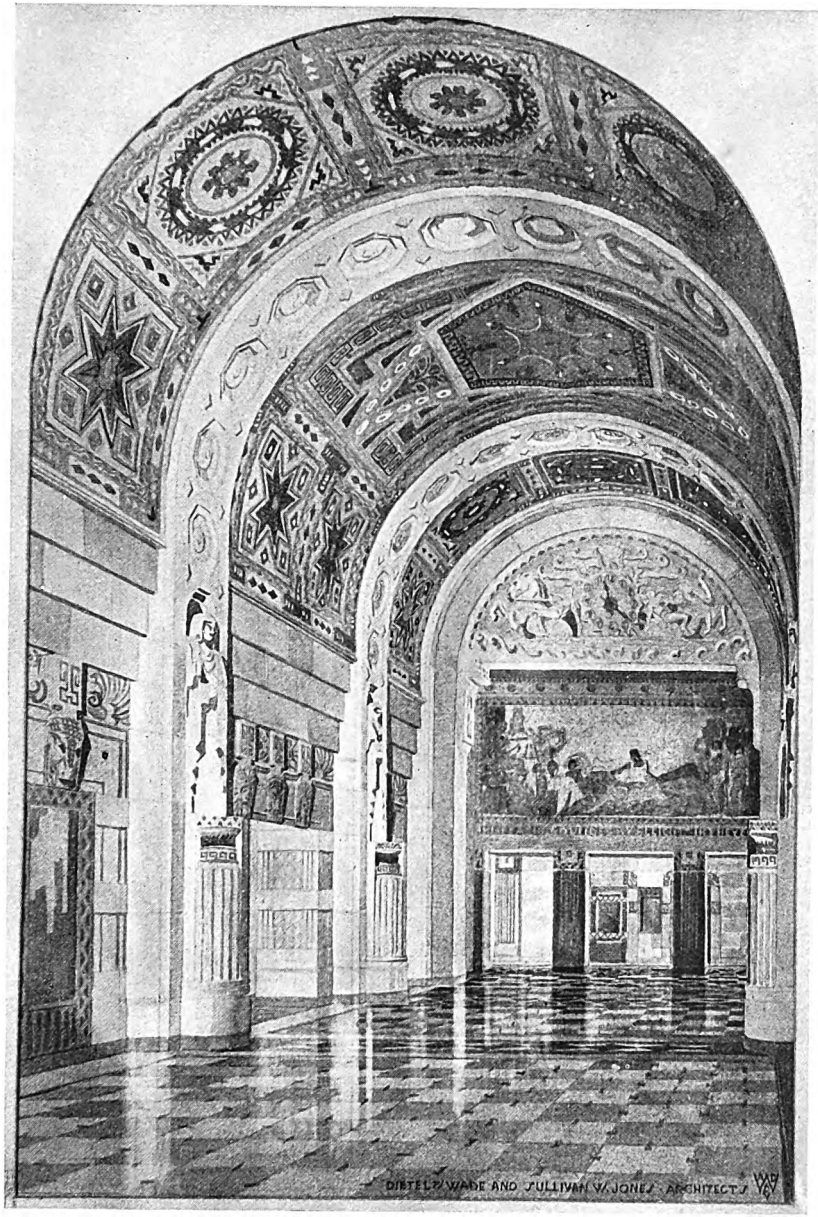

ONE OF THE FOUR GROUND FLOOR CORRIDORS AND THE ROTUNDA OF THE GROUND FLOOR
BUFFALO CITY HALL, BUFFALO, NEW YORK—DIETEL AND WADE AND SULLIVAN W. JONES, ARCHITECTS

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Architecture which would truly represent the wind-swept coasts of rock-bound New England would be absurd in the fragrant gardens and the sunlit beaches of Florida. The giant redwoods so characteristic of California would be gigantic folly in architecture for the treeless plains of Kansas. In the little kingdoms of the classic past, the peoples were homogeneous. They occupied small areas dominated for the most part by single great cities. But in the immense continent of America, we have all sorts of people, all varieties of climatic conditions and all kinds of occupations, and no one city can claim to be the center of the national life of our people as did Athens or Byzantium or Rome or Paris or Babylon.

Consider the fisheries of New England—the manufacturing of the Midlands—the lumbering of the Northwest and the dreamy cotton-raising of the South. These cannot all be knit together into a common unit without producing a mere polyglot jumble. And architecture is expressive of nothing without harmony and unity. No American building is erected to serve all of America at one time; each is built to meet the needs of a particular locality.

We can, however, and we should, have in each of these various localities such as Buffalo and its immediate tributary area, architecture which is expressive of the life of that locality. Keeping in mind this brief survey of the nature of architecture then, let us look at our newest contribution to Buffalo's architectural history. Let us examine the plans for the new City Hall now under construction on the West side of Niagara Square.

First let us remember that it is to be a machine. It is designed for the efficient conduct of the city's business. The arrangement and inter-relationship of its parts must conform to the working needs of the business of managing the affairs of Buffalo, N. Y., a city of nearly 600,000 inhabitants, located in a certain place on the banks of the Niagara River. The translation of its interior into rooms and co-ordinated groups of rooms must be adjusted to the organization chart of the city government; the flow lines of traffic must be clearly traceable.

The greatest possible measure of flexibility has been given to this frame of function, because there will be future changes. If this building is to endure and continue to serve the public purposes most effectually, it must possess adaptability to new conditions that are likely to arise as time goes on. That is to say, you cannot put stairways, for instance, where they might be ideal today, if such location of the stairways will interfere with probable future changes.

We can, however, and we have, for example, made all of the interior partitions on the departmental floors, easily and economically movable. If it develops, let us say, that in the department of Public Works, the partitioned sections allotted to the Water Bureau are too small, they can be enlarged. If the section allotted to the Building Bureau is too large, the space can be reduced. This adjustment can easily be made by shifting the partitions to secure the desired rearrangement. It is difficult for these various departments to know how their internal arrangements will work out until they have been tried. Under this plan of ours they will be able to try out the first or tentative arrangements of partitions and if changes are then desired, they can be made until precisely the most satisfactory scheme is achieved. These changes will be practically without cost to the city and they will not mar the beauty of the interior.

If I seem to dwell over-long on this matter of efficiency in the operation of the building—rather than on the efforts to achieve beauty—it is only that I may impress on you the importance of fulfilling the purpose for which it is being built. We as a city are not spending six and one-half millions of dollars just to make a certain locality more beautiful. We are spending the money because this new building is needed for certain very definite purposes. If at the same time we can make it beautiful, so much the better.

You would not, for example, be willing to trade a good, smoothly-running automobile for one which is more beautiful to look at but which will not run. However, we are not forced to choose between ugliness and efficiency as against beauty without efficiency. We can combine them. As a matter of fact, the building or other machine which functions best is likely also to be the best-looking. This is true of every machine. The instrument which works well has a beauty of its own. For example in the human body the arm or the leg which best answers the uses of an arm or leg is better-looking than a limb which is not able to function for the useful purpose for which it is intended.

So, then, it becomes the duty of the architect to plan a building which will work best. When this has been taken care of, he may then organize the various parts in such manner that grace and dignity of functioning may go hand-in-hand with grace and dignity of appearance. We do not build beauty onto the structure purely to achieve beauty. We try to build beautifully and in keeping with its character, what must be built in any case to answer the purposes for which the building is authorized in the first place.

In accomplishing this aim, endless trial is made of combinations which will never be used. This is done to find out precisely the form which will be most nearly perfect for the purpose. Before the arrangement of the masses of the main structure was decided on—as it appears in the pictures of the building as it will look when completed—more than 500 sketches were made, only to be thrown away. If this fact is kept in mind it may be easier to follow what I am about to say.

In every one of these preliminary sketches showing the relationship of the masses to one another, it was necessary to make provision for all of the interior parts. Elevators and corridors, toilets, stairs and so on must be diagrammed in relation to the working areas. Plans of this nature are designed for each mass elevation in order to decide the best means of achieving efficiency plus beauty.

Having decided on the desired mass, the plans were more fully developed. A careful check was made to make certain that provision had been made for every

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necessary function of the building—in a word, to make sure it would be workable and efficient. At this stage we had a fair idea of the conception and proceeded to crystallize it in the form of a model in plaster. From this model we were able to work in three dimensions, revising it endlessly by the weeding out of ungraceful and awkward corners and the like. This went on until there was practically nothing left of the first model. Then a second working model was made and subjected to the same treatment—and finally a third model which proved satisfactory.

This third model is very similar to the illustration showing the exterior of the building flooded with light at night. While reference is being made to this picture, I might mention that the illumination of the entire building, as shown in it, has a very definite purpose. That purpose is to drive home to people—particularly to visitors in Buffalo—the fact that in this city electricity is both cheap and plentiful. In this way it advertises one of Buffalo's greatest industrial, commercial and social advantages.

If you will look at the illustration showing one of the studies of the tower, and at the study of the entrance colonnade, you will see something of what took place, after preparing the plans and models, in arriving at a satisfactory façade. So far we have been discussing the structure as a whole. In a general way I might say that the same process was and is being followed, multiplied many hundreds of times, in the countless details. Every possible point of variation was gone over scores of times or even hundreds of times, to the point of exhaustion, seeking the highest approach to perfection in the finished work. Take, for example, the reproductions of the clay sketch or study models of proposed column capitals and a spandrel design. Note that the left-hand corner and the right-hand corner of the capital are different. These were the two best and were developed on the same cap to aid us in making the final decision as to which one to use. Incidentally, you will notice also that the word "Vintage" is in two type-styles for a similar decision. In a building of this character, where all of the ornamentation has been created on original lines, a special type-style must be designed for the lettering. This type-style must conform to the spirit of the ornamentation that prevails throughout the building.

If you think that this seemingly simple matter of lettering does not cut into an architect's sleep, just try sometime to design a complete alphabet in agreement with the feeling of something new.

And so it goes on and on, the endless chain of detailing. The architect must not only know where each stone or pipe or window is to go, but he must set it down on paper so that the mechanics who come after him will know precisely what they are to do without the possibility of error.

Let us look for instance at the simple matter of a door. Any one of the 2,165 doors in the new city hall will do. Each door, down to the last detail, must have its own identification. Each is accurately listed, given a number, told on what floor it will go, whether it will be of wood, steel or bronze, whether it will be glazed or solid, whether it will have a transom, kick plates, pull bars, push plates, transom adjusters or checks, how wide it will be, how high and how thick, whether its threshold will be marble, slate or bronze, how many hinges it will have, of what size and of what material, the type of lock and knobs and their design. When all of these things are done, it does not mean that the architect is through with that door. He must still supervise the work and see to it that the door is made and hung in a skillful and workmanlike manner—exactly in keeping with the instructions which he has put down on paper.

Nothing whatever is left to chance or to the whim of the contractor, the mechanic, or the manufacturer of materials. From the time when the city decides to erect a building until the keys are finally turned over for the finished job, the architect is in the closest possible touch with every phase of the planning and the work—guiding, advising, making decisions and sometimes spurring on any contractor who may be slow in handling his share of the work.

On the other hand, delays in erecting a building are often the fault of the architect himself. He must be ready with his detailed plans covering each part of the job before the sub-contractor can do anything. This is called servicing the contractor and the utmost care is taken to have this service perfect.

Now there are two ways for an architect to proceed with these detailed plans which the workmen must use daily and hourly, because they show exactly where every stone, pipe or window is to go. One way that is followed by some architects with success is to complete the detailing of the entire exterior of the building and then to start detailing the interior. Our method is different in this particular—we move forward with the detailing of the exterior and the interior at the same time. By following this method we find it comparatively easy to keep well in advance of the needs of all of the various trades. At the present time, although the contractors are still working on the foundations, detailed drawings are ready up to the fifteenth floor on the outside and up to the third floor on the inside of the building. This is some months ahead of the prospective needs of these plans in both cases. We expect to keep this lead up to the end of the job.

Delays of the architect in providing these detailed drawings are a frequent cause, not only of delays in completing a building, but also of discrepancies involving extras. If, for example, the plumbing pipes come into conflict with a steel beam at any particular point, the detailed plans will show it. They will also show exactly how the pipe is to be detoured around the steel beam. The sub-contractors and the mechanics can proceed only when the plans are put into their hands by the architect. They are usually anxious to get their share of the work finished. With complete and careful servicing by the architects—a service which keeps the detailed plans constantly a good margin ahead of the need of them—I see no excuse whatever for any delays in completing the job.

Has any of you listeners ever dreamed of doing a

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should be reason to believe otherwise. Just as in the case of an army in the field the general plans the campaign and supervises the movement of the troops—in the same way, an architect plans a modern building with his associates and his staff and then directs the operations toward each objective. The contractors and the workmen carry out these carefully planned directions.

It is not enough for the commanding general merely to map out a plan of campaign and then go away and forget all about it. In the same way the architect finds that it is not enough merely to plan his building. He must keep in constant touch with its progress. He must see to it that action follows his planning and conforms to it exactly as he intended that it should.

If you were to visit Niagara Square right now, you would see a huge hole in the ground. Below the surface of this gash in the crust of the earth are 180 great caissons of solid concrete. These caissons average about five feet in diameter and each extends downward from 25 to 30 feet to bed-rock. Upon these 180 caissons the weight of the building, 184,000,000 pounds, will rest. These are quite as much the concern of the architects as the façade, the tower, or the shape of the building itself.

While this foundation is being prepared, stone is being shaped and cut in the quarries at Kasota, Minnesota; Amherst, Ohio; and Briar Hill, Ohio. At Lackawanna are being fabricated the steel beams which will soon rise in a network above the foundations.

Did it ever occur to you radio listeners that when the steel beam is riveted perfectly into its steel column, and when each stone, quarried and milled hundreds of miles away fits exactly into the place prepared for it, that this is not an accident? All of this work is done on paper long before it is done with the actual building materials. Each of the shops where material is being made ready is working on exact shop-drawings, with a record and number of every piece of material and where it is to go. These shop-drawings are prepared in exact agreement with the drawings in the office of the architects where they originated and thoroughly checked by them. Moreover, by frequent inspection trips to quarries, foundries, and mills, the architects constantly check the quality and the production as well as the progress made in getting the materials ready. No errors or delays can be permitted. As the building advances, progress is shown on a chart in the architect's office covering the work of all of the various contractors and trades and the dates when each of the phases of the work should be started and when completed.

Ornament that is to be carved in stone is first drawn up in the architect's office to the actual size in which it is to be carved. Models in clay are then made from these drawings, giving the architect an opportunity to examine and correct them in three dimensions. After this is done they are carved in stone at the quarry and finally put in place. Other materials such as cement, paint, and all compound materials are put to chemical tests to make sure that they are equal in every way to the requirements demanded in the architect's specifications. After this has all been done, permission is given the contractor to use those materials which have been proved by test satisfactory.

When the thirsty department clerk on the top floor of the new city hall, five or twenty-five years from now, draws a glass of water from the faucet it will be there for him because the architects' staff has planned in perfect detail, the size, the materials and the route of the pipe to the point where it becomes available. The route of this pipe is carefully detailed—where it must detour to pass around structural beams and so on—to say nothing of the accurate planning of the hydraulic force needed to permit its flow.

A word now about the style of architecture. Having organized the functions within the building into an effective working relationship to one another, we now proceed to enclose them within such outer garb as will at once harmonize with their necessary functions, unify the various elements into a harmonious whole and give expression in terms of architecture to those characteristics of Buffalo as have distinguished it among the cities of America and of the world.

The design is in the modern spirit. We have not gone back to the Greeks, to the Egyptians or to the Italians of the Renaissance for our inspiration. Our building being of the present time its dress must be in keeping with the age. A native Buffalonian, decked in the flowing robes of Athens, the feathers of a red Indian or the wide-sleeved kimono of a Japanese Samurai would not be more ludicrous on the streets of Buffalo today, than would be a modern building, erected for modern purposes, clothed in the garments of a Greek temple or an Egyptian tomb.

We may and do admire the grace of line and the sheer beauty of the architecture of the past, and the splendid spirit in which it sings to us of the glories of the past. But we must remember that the needs of a public building in Buffalo in 1930, A.D., are not the same as the needs of the city of Athens in the time of Pericles. We must build and clothe our building to meet the present-day conditions. We must seek to build beautifully in the same spirit that actuated the Greek and the Roman, the French and the English architects at the time of their greatest glory—even though what we are building will not be the same and it will not look the same. We cannot accomplish our purpose by feebly imitating the exact formulas by which they met their problems; problems which were quite different. We must meet our own problems in our own way.

Let us consider, for example, the site and setting for the new city hall as compared with the government buildings of Europe. In Europe public buildings are set back from the highways. They express, in their long approaches, something of the awe and reverence which kings have always tried to inspire in their subjects. The ordinary citizen in Europe has for centuries been taught to approach the government in fear and trembling. Government is not his servant but his master.

With us in America it is different. We look upon

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SKETCH MODEL FOR CAP OF MAIN COLONNADE

our city and other governmental divisions simply as means of transacting our joint or public business. When we have dealings with our city government we do not wish to feel that it is a power aloof from us and hard for us to approach. We like to feel that it is efficient and businesslike. We want to get there, get our business done and get away again. We want our servants not aloof, but handy. So, a city hall which is practically on the sidewalk, easy of access and free from all unnecessary red tape, suits our purpose best. Another way in which we Americans express the same idea is in the fact that every new administration promises to us, above all things, to give us a business administration. That is in harmony with the American spirit and tradition. It is what the people want above every other consideration. A city hall easy to get at and easy to do business in expresses the idea architecturally.

There is no wind-swept stretch of empty esplanade to face, no weary flights of seemingly endless steps to climb, no frowning statues of dead kings to salute, nor any other symbol of the citizen's subjection and surrender. No! Such things are out of tune with modern life in Buffalo and America. They belong to the dead past with Roman emperors and Egyptian kings. In this building we are recording the spirit of Buffalo in the America of today. Our city hall will be on the sidewalk in the heart of the city's commercial and industrial life, where public servants may respond quickly and efficiently to the will of the citizen.

Within and without, in its masses, its ornamentation, its graceful contours and its avenues of flowing traffic, the new city hall will be expressive of the masculinity, the measured, overwhelming sureness and strength of modern industry, the punch of Buffalo, if you please, with its industry, its commerce, and its electric power resources.

With all of this designing, this ornamentation, this expression of architectural symbolism and the operation of a great structure, the architects have not permitted themselves to forget that all these things cost money. The architect must know market values of materials so that in his planning he may come within the amount of money appropriated for the purpose. It is interesting to note that the final contract prices for the new city hall total about $11,000 less than the city has authorized. It is the architect's business to see to it that proper economy is exercised when he is preparing his plans and specifications. This does not always mean cheapness in price or merely low figures in first costs. It involves as well, due consideration for the expense of up-keep, replacements and operation. It is often wisest to specify materials which cost more in the first place but which show a saving in durability, in operation or in subsequent replacements. In our choice of materials we have sought to express in colorful harmony the power and purpose, the life and character of a great and growing community whose interests are centered in this building; but in all of these things we have never lost sight of the fact that for every dollar spent, the people desire a dollar's worth of building.

When the new city hall is turned over to the city, which should in time for the proposed Buffalo centennial of 1932, I am persuaded that Buffalo may well take pride in it and that it will encourage private owners to emulate it in character, in dignity and in durability.

MODEL STUDY FOR ONE OF THE SPANDRELS
SHOWING THE PRODUCTS OF THE SOIL AROUND BUFFALO

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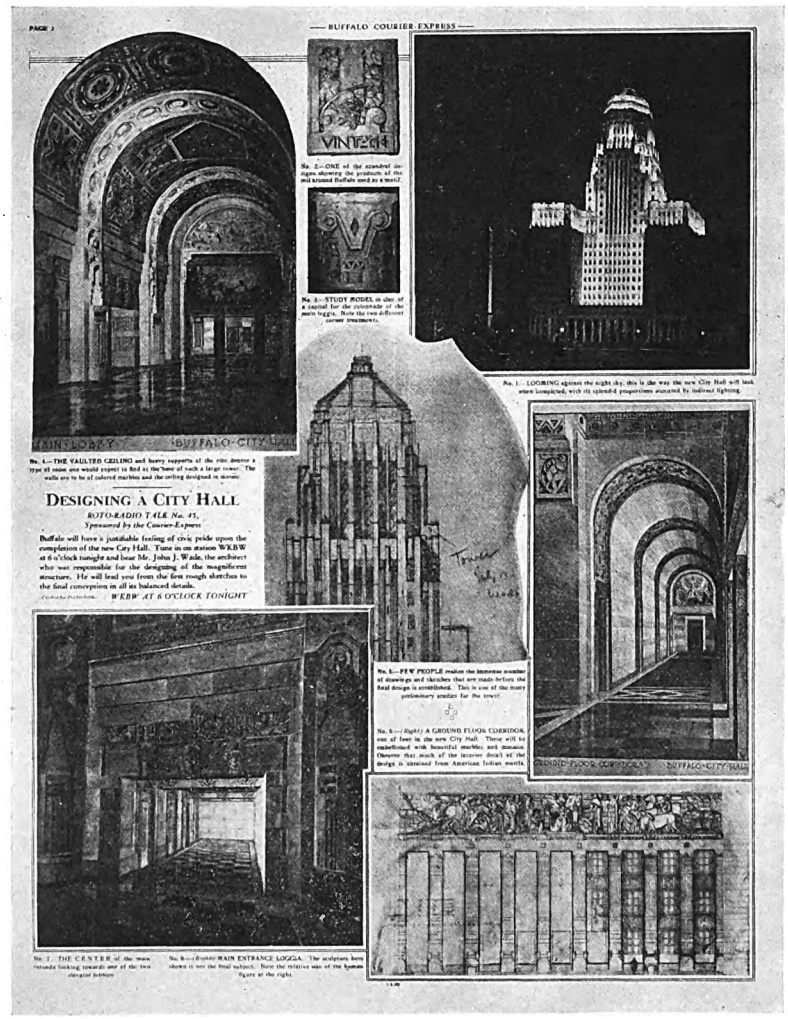
I have said little about the beauty of the structure, because I believe that beauty is in the eye of the beholder. I hope that you, who comprise the great audience combined in The Buffalo Courier-Express and Station WKBW will feel in looking upon it in its completion at least something of the thrill of pride which we architects have felt as we have seen it grow on paper under our hands. We hope you will feel with us that we who live in Buffalo are, truly speaking, citizens of a great and powerful metropolis; that you will feel we have done well in placing upon the topmost tower of this structure dedicated to your service, a jewelled crown—a diadem of emeralds, rubies, sapphires—symbolic of the power the majesty and the beauty which have brought to Buffalo her title of Queen City of the Lakes.


PAGE 2 — BUFFALO COURIER-EXPRESS —

DESIGNING A CITY HALL

ROTO-RADIO TALK No. 45,
Sponsored by the Courier-Express

Buffalo will have a justifiable feeling of civic pride upon the completion of the new City Hall. Tune in on station WKBW at 6 o'clock tonight and hear Mr. John J. Wade, the architect who was responsible for the designing of the magnificent structure. He will lead you from the first rough sketches to the final conception in all its balanced details.

WKBW AT 6 O'CLOCK TONIGHT

PAGE FROM THE BUFFALO COURIER-EXPRESS, JANUARY 5, 1930

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